

# **IMPLEMENTATION TEAM MEETING NOTES**

**March 4, 1999, 9:00 a.m.-4 p.m.**

**NATIONAL MARINE FISHERIES SERVICE OFFICES  
PORTLAND, OREGON**

## **DRAFT**

### **I. Greetings, Introductions and Review of the Agenda.**

The March 4, 1999 meeting of the Implementation Team, held at the National Marine Fisheries Service's offices in Portland, Oregon, was chaired by Brian Brown of NMFS and facilitated by Donna Silverberg. The agenda for the March 4 meeting and a list of attendees are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced in the body of the text may be too lengthy to attach; all enclosures referenced are available upon request from NMFS's Kathy Ceballos at 503/230-5420 or via email at [kathy.ceballos@noaa.gov](mailto:kathy.ceballos@noaa.gov).

Brown and Silverberg welcomed everyone to the meeting, led a round of introductions and a review of the agenda.

### **IV. Decision on Spill Passage Studies at The Dalles and John Day Dams.**

SCT co-chair Bill Hevlin led this discussion of this issue, noting that it hearkens back to the earlier discussion of the ISAB's endorsement of spill as the passage route of choice. This particular issue is an illustration of the fact that some, at least, believe that, when it comes to spill, there can be too much of a good thing, Hevlin said.

Hevlin distributed a packet of information containing an overview of the planned survival and FPE studies and spill program at The Dalles in 1999 and 2000, together with comments from ODFW, WDFW, CRITFC, the Fish Passage Center and the Corps, as well as a white paper on

the 1999 John Day spill program. This packet is attached as Enclosure E.

At the last IT meeting, Hevlin said, I briefed you about the effort underway in SCT and the SRWG to resolve the study design issue connected with gaining further information on juvenile passage concerns at The Dalles, specifically, spill passage. I also mentioned that, while there has been no major disagreement so far on the study plan at John Day Dam, activities at that project are related to activities at The Dalles because of transmission reliability concerns, Hevlin said. Basically, the level of spill at The Dalles affects the amount of daytime spill that is possible at John Day.

The SCT and SRWG have been working over the past months to try to reach agreement about how to proceed this spring with the studies at The Dalles, Hevlin continued. The participants in this issue have felt strongly enough that they've put their opinions down on paper; hence the thickness of the packet I distributed earlier, Hevlin said. Jim Ruff and I, as SCT co-chairs, are bringing this issue to your attention because we have been unable, at SCT, to arrive at a consensus about the study design at The Dalles. This needs timely resolution, he added, because the spring migration is only a month away.

Hevlin then presented a basic overview of the two sides to this issue, referring the IT's attention to Enclosure E for a more detailed look at each side's position. First of all, he said, we've now done two years of survival studies at The Dalles, the goal of which is to compare survival through a 64% spill level and a 30% spill level at the project. As you'll recall, he said, this study arose as a result of concerns about the configuration of The Dalles tailrace, identified during hydraulic modeling – essentially, some felt that high spill levels might be causing higher predation rates. There was also some concern about the fact that the decision to put The Dalles JBS on the shelf meant that spill and sluiceway passage were the only real passage options at that project; we felt it would be prudent to be sure that we were getting the expected high survivals at The Dalles, Hevlin explained.

Basically, there is a wide gulf in opinion among the various parties to this issue about what the information generated in this study over the last two years tells us, Hevlin continued. That's one component of this issue; there is also a great deal of debate about what needs to be studied in 1999 and beyond.

In terms of what the information tells us, Hevlin said, some feel that the variability in the survival study data is so high, and the precision so low, that the two years of data tell us very little. Generally, those who hold this opinion feel that changing the spill level from 30% to 64% every few days affects what we're trying to tease out, because tailrace conditions are too much in flux. They would prefer to see a different type of study in the future, one that would hold the spill level constant at 64% over the entire migration season. This is the type of study advocated by Oregon and Washington, Hevlin said.

NMFS, on the other hand, believes that there is enough statistical validity to the study results from the past two years to give us serious concern about passage problems at the 64% spill level, Hevlin continued. What NMFS would like to do in future years is test the hypothesis that survival is higher at the 30% spill level more rigorously, and to find out what the causal

mechanism is. To do that, we would like to see the same type of study in 1999 and beyond that has been done in the past two years, looking alternately at the two spill levels within the passage season in an attempt to gain more precision and statistical reliability.

Basically, there are valid concerns on both sides of this issue, and that's why it has been so difficult for the SCT to resolve it, Hevlin said. It has been suggested that we ask the ISAB to develop the study plan for 1999; the problem with that is the ISAB workload, given the short time we have to resolve this issue. The ISAB might be able to get to it by next fall or winter, but that would mean no study in 1999.

In terms of how this relates to John Day, Hevlin said, there is a desire to test the effectiveness of daytime spill at that project. Currently, the only spill at John Day occurs during nighttime hours. BPA has told us that economic and transmission system reliability concerns limit the amount of daytime spill you can have simultaneously at The Dalles and John Day. If we're spilling 64% daytime spill at The Dalles, essentially, we can't have 64% daytime spill at John Day. We have to balance the two, which is going to limit what we can learn at John Day, Hevlin said.

As Bill mentioned, said Ruff, what we'd like to do at The Dalles is come up with a study design that yields more precise results, because the results from the past two years' study have been questioned. The question is, are the two basic study designs proposed for 1999 – alternating 30% and 64% spill, and holding the spill level constant at 64% – equivalent, in terms of their ability to provide statistically robust results?

That's an important question, Hevlin agreed. No matter which study design is selected, said Gary Fredricks of NMFS, we're looking at the same number of release groups. We are attempting to increase the statistical precision for that three release-group scenario. In other words, he said, there should be no difference in precision between the two proposed study designs.

I would also like to be sure that everyone realizes that we're not proposing any change to the normal operations at The Dalles until these studies are concluded, Fredricks said. The Biological Opinion spill levels still apply at The Dalles, and we're only talking about the study period here. Also, while NMFS is proposing continued evaluation of survival at 30% and 64% spill at that project, we're not locked into 30%. We're just trying to gain some statistical separation between survivals at the higher and lower spill levels, he explained.

Nielsen said Hevlin had accurately described the difference in opinion on this issue; the central issue, for us, is providing fairly constant tailrace conditions for predator distribution, Nielsen said. One of the concerns about alternating between 64% and 30% spill at The Dalles is the effects of that operation on predator distribution, he continued, but beyond that, our view is that the 64% spill level was set at The Dalles to provide 80% fish passage efficiency. If there are problems with survival at that spill level, we need to identify what is causing those problems and make corrections.

In terms of the connection to John Day, Nielsen said, Washington is not convinced of the

need to study 24-hour spill effectiveness at that project. As for the issue of ISAB review, he said, while I agree that it isn't realistic to expect the ISAB to review the 1999 study plan prior to the start of the migration season, I would still like to get it on the ISAB's plate for completion as soon as possible. Even if it won't be useful for 1999, such a review would be useful for next year, Nielsen said.

Bob Heinith said CRITFC generally concurs with the states' position on this issue. Two years ago, when these studies began, the Tribes asked that the study design be reviewed by the ISAB, in a formal letter sent to Rollie Schmitten. NMFS replied that the Tribes should have made their concerns known through participation in the NMFS forum, and that the studies would proceed as planned. We're now two years down the road, Heinith said, and we still don't have concurrence on the basic study design, much less the results of the study. Now NMFS wants to go forward with a new round of study, despite the lack of regional agreement on the study design, spending another \$500,000. This raises an accountability issue; when we ask Congress for money for research under the CRFM budget, if there is the type of serious disagreement we see on this issue, then the study should not go forward, Heinith said. Therefore, the Tribes feel that survival should be evaluated under a the static 64% spill level set in the BiOp, and that we need to compare the results from all routes of passage at The Dalles. John Day should be treated as a decoupled and separate issue, Heinith said.

Nigro said Oregon agrees with the points made by WDFW and CRITFC. Ron Boyce added that ODFW is still unclear about the information on which NMFS is basing its conclusion that 64% spill is compromising fish survival at The Dalles. Our review of the study results from 1997 and 1998 leads to exactly the opposite conclusion, Boyce said. We believe that alternating 64% and 30% spill within the season leads to confounding results, and that the best results can be obtained through a static spill condition; we also believe that any spill studies proposed for John Day Dam should not limit the study plans at The Dalles, and that that should be a separable discussion, Boyce said.

So there you have the impasse, in a nutshell, Silverberg said. Ruff asked whether, given the magnitude of the runoff forecast this spring, it will even be feasible to restrict spill to 30% at The Dalles so that a 30% vs. 64% spill test could be done. Rock Peters replied that, based on the current forecast, the Corps believes the test will be feasible, except for about a one-week period this spring

Ultimately, John Ferguson observed that a better understanding of the relative statistical precision of the two proposed study designs is needed before an informed decision can be made. Is it fair to say that the IT is interested in having NMFS pursue such a comparison before making a decision? Brown asked. Yes, Nigro replied, observing that it is possible that such a statistical analysis may show that neither study design has the power to answer the basic question. I think the group needs to be prepared for that possibility, he said, and to begin to think about what we're going to do if it looks as though further testing isn't going to clear up some of this uncertainty. He added that, in Oregon's view, the default would be to maintain the BiOp spill levels at The Dalles, because the burden of proof required to change that program would not have been met.

In response to a question, Peters said the Corps plans to begin tagging fish for the study at The Dalles on May 1; he added that, if any major changes to the current study design are going to be necessary, the Corps needs to know about them as soon as possible.

Brown said Ben Sanford and Cliff Periera are currently working to refine the statistical precision of the within-season comparison proposed by NMFS for the 1999 test at The Dalles – is there agreement that Ben and Cliff should also look at the statistics involved in a between-year comparison, such as the one in the study design proposed by the states, or are there additional names we should be adding to that subgroup? Brown asked.

Again, from our perspective, because we're not looking at sluiceway survival this year, this is a major problem, Heinith said. According to the NMFS white paper, under a 30% spill regime, we could be sending 50% of the fish through the sluiceway, and we don't know what their survival is. To CRITFC, it seems as though our first priority should be to get a rigorous idea of the percentage of fish that are surviving sluiceway passage at The Dalles, Heinith said. In the Tribes' view, we need a solid evaluation of the relative survival of fish through all routes of passage at The Dalles, under a stable spill level of 64%.

Boyce said Oregon concurs with CRITFC's position, adding that none of the currently-proposed study protocols are designed to obtain adult recovery data. Oregon feels that adult information is very important for an adequate evaluation. Ferguson said he had discussed a possible adult survival evaluation methodology with Ben Sanford, but that they had concluded that, based on the available number of returning adults and other logistical challenges, a statistically meaningful evaluation simply is not feasible at this time.

Collis returned to Brown's suggestion that a statistical comparison of the relative precision of the within-year and between-year study designs needs to be accomplished before the IT can make a decision on which study should go forward at The Dalles in 1999. She asked Heinith if it is fair to say that the Tribes' position is that such a statistical comparison is unimportant, and that it would not be acceptable for spill at The Dalles to be reduced to 30% without changing the BiOp. We definitely think there needs to be consultation, Heinith replied, not only with the operating agencies, but with the Tribes, under the Secretarial Order – it needs to be a government-to-government consultation, and it needs to happen before this action is taken.

Boyce said that Oregon would prefer that the comparison of statistical precision between the two study designs be undertaken by the ISAB, if they are available in time. Ruff said he would check with Chip McConnaha on the availability of the ISAB to undertake this work.

Brown observed there seems to be a suspicion, among at least some parties in the region, that NMFS has already made some sort of determination about the relative merits of 30% vs. 64% spill at The Dalles. We have heard also that that would be a change to the Biological Opinion, which would require consultation on a number of different areas, he said. I want to make clear once again the fact that NMFS has not made a determination about the relative merits of 30% vs. 64% spill, said Brown; I agree that, if we were proposing such a change to the Biological Opinion, that that would require a fair amount of consultation.

Brown added that, in terms of the ISAB's involvement in this process, once we figure out which is the best study design at The Dalles for 1999, implement that study and have results, that would be the time to go to the ISAB to both evaluate how that study was done and whether we indeed got what we thought we got, and whether or not the way we are proposing to subsequently implement the results either in further study, or in adjustments to the mitigation program at The Dalles, make sense. We would either seek the ISAB's review of these items, or request their advice on how best to obtain independent peer review of such a package, Brown said.

Jim Yost said that, in Idaho's view, the studies that have been done over the past two years need to be continued – we are more interested in the within-year study than the between-year study, he said, although Idaho does see some merit to a between-year study as well. Generally, said Yost, Idaho supports the NMFS-proposed study design, although we are also interested in seeing the assessment of the statistical validity of the within-year and between-year study designs go forward as soon as possible. Idaho also agrees that both the study design and its results ought to be reviewed by the ISAB to be sure that the study, as designed and implemented, is producing the information we need, Yost said.

Brown reiterated that NMFS began this study because of hydraulic model-based concerns about fish safety at 64% spill. Admittedly, he said, those hydraulic model observations were not very robust, which is why we wanted to do this study. If we continue this within-season comparison, and find that there is a difference in fish survival at 64% spill and 30% spill, that doesn't mean NMFS will automatically conclude 30% spill is the best program at The Dalles, Brown said -- it will only mean that we have obtained some validation of our original concern. At that point, we can begin to discuss ways to test the solution to that problem; that solution might include testing spill at a stable level to get at some of the concerns about predator distribution. I should add that such a stable spill level would not necessarily be either 30% or 64% spill, Brown added – it might be some level in between. Basically, however, at this point, all NMFS is trying to do is see whether or not there is any substance to our concern about 64% spill at The Dalles.

Fredricks suggested that it might make sense to broaden the scope of the review the ISAB be asked to undertake to include not only the study at The Dalles, but other survival studies of this type as well. I can anticipate similar discussions to the one we've had today in the future, unless we get this resolved, Fredricks said. Ruff agreed, saying that this puts a slightly different, and possibly more interesting, twist on the assignment to the ISAB.

Heinith made one final point: that this issue really comes down to whether a study should drive the spill operation at The Dalles, or the operation should drive the study. The state and tribal perspective is that the BiOp has specified a particular spill operation at The Dalles, Heinith said; what we should be studying is how effective that operation is. NMFS, on the other hand, is suggesting that we change the operation to accomplish the study, and that's a problem. Understood, said Brown.

After a few minutes of further discussion, Brown said it probably does not make sense to try to resolve The Dalles study design issue at today's meeting, given the additional work that

needs to be done on study plan development and study plan statistical precision comparisons. We will consult with the other parties as appropriate, depending on where this goes as we get some of that additional information, Brown said. NMFS will ultimately provide a written record of our decision, and the basis for that decision, including a response to the comments we have received on the study plans and the need for additional consultation, he said. Can we discuss this further at the April IT meeting, rather than simply waiting for NMFS' written decision? Nigro asked. I have no objection to that, said Brown, although I suspect this may end up as a divisive issue. If that proves to be the case, and NMFS ends up making a decision over the objections of some or all of the other salmon managers, I would like to do that as quickly and cleanly as we can, and move on, Brown said. I think it would be appropriate to develop the record of who agrees with the NMFS decision, and who objects, through this forum, and wrap it up as a formal policy item at the April IT meeting, Nigro said. No objections were raised to Nigro's proposal.

Silverberg summed up the future action on this issue by saying that Ruff has agreed to check on the ISAB's upcoming schedule and availability to address this issue; that development of the study designs will continue; that the statistical comparison of the relative precision of the two proposed study designs will move forward; that technical and policy-level consultations between NMFS and the states, tribes and federal operators will continue; and that this issue will be the subject of further discussion at the April IT meeting.